Fashion a Fish

Objective

Students will identify of the basic parts of a fish and how those parts help a fish live.

Curricular Areas

Science (fish and the parts of a fish); Math (puzzle making and geometric figures); Social Science (group work and class presentations); Art (creating a fish); Language Arts (reading names for the parts of a fish)

California Content Standards

Science: **K**–Life 2, Earth 3, Investigation 4; **1st** & **2nd**–Life 2, Investigation 4
Math: **K** & **1st**–Measure & Geometry 2.0, Reasoning 1.0
Social Science: **K**–1 & 3; **1st** & **2nd**–1 & 4
Language Arts: **K**–Written/Oral 1.0, Listening 1.0, 2.0; **1st**–Reading 1.0, Writing 1.0, Written/Oral 1.0, Listening 1.0, 2.0; **2nd** – Written/Oral 1.0, Listening 1.0, 2.0

Method

Students work in groups to create a fish using cards of various fish parts. They will color the fish in its habitat. Cards will have fish parts written in both English and Spanish.

Materials

- Coloring utensils
- Copies of the fish puzzle, one per student (use cardstock or heavy gauged paper)
- Paper
- Glue

***Note:** If possible bring in a model of a fish

Background

Fish are aquatic animals that have special adaptations in order to be able to live in the water. Their body, gills, eyes, nostrils and fins allow them to live under water and survive in their habitats. Adaptations, allow the fish to be better suited to the habitat in which it lives. Because of the variety of conditions within each habitat, many different fish can live together and flourish.

Procedure

1. Ask students how many have ever seen a real fish? What do students like about fish? Why is a fish different from other animals?
2. Read *Swimmy*, the *Rainbow Fish* or *El Pez Arco Iris* to the students or show them many pictures of different fish. Ask: How do fish breathe? What do fish eat? How do they swim? Where do fish live?
3. Divide class into 3 to 4 groups. Show students the cards and model how to create a fish and glue it together. Explain that it is a puzzle which they will color after the pieces are in place.
4. Pass out cards and discuss the body parts and the function of each part.
5. Students create their fish, glue it to a sheet of paper and color the fish and its habitat (home).
6. Have students share their projects and explain the various parts of their fish.

Extensions

1 Observe actual fish. Have students discuss what they see–the body parts and elements of the habitat.

2 Have students do a fish print. Use a rubber fish replica available from classroom suppliers. This activity allows students to experience a Japanese cultural artistic expression called Gyotaku, the art of Japanese fish printing. The activity is similar to the way Japanese fishermen recorded their day's catch. The art of gyataku (gyo=fish, taku=rubbing) originated in Japan during the early 1800s and was first practiced by fishermen to preserve a record of their catch. A gyotaku is made when watercolors are painted on the actual fish and then rice paper or fabric is applied and gently rubbed. The result: a mirror image, rich in detail and color.

3 Have students make a 3-dimensional "stuffed" fish, and identify the different parts of that fish. Pattern for fish follows activity. Enlarge the pattern with a copier to desired size.

4 Dissect a fish for observation.

Evaluation

- Name parts of a fish and how each help the fish survive.
- Where do fish live and what does their habitat provide?

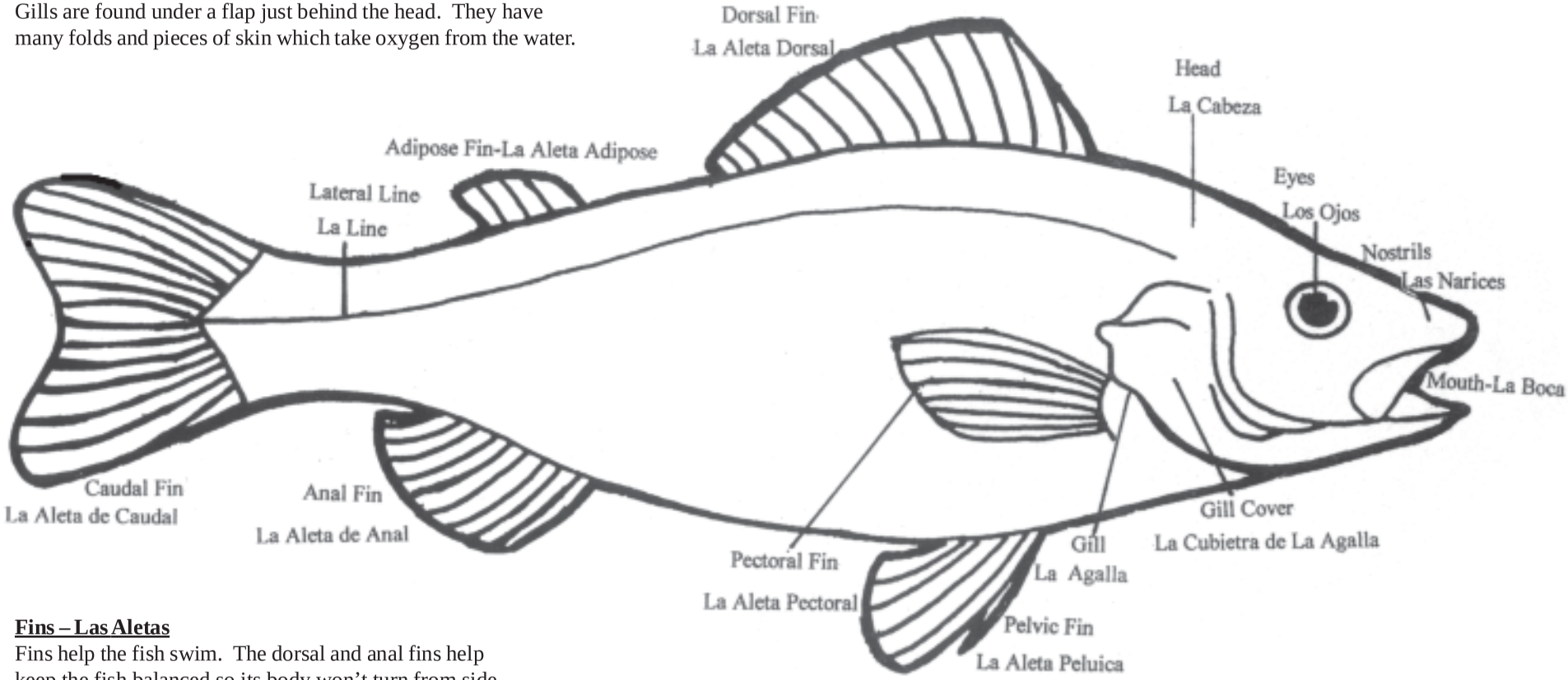
Fish Adapted to Life in the Water

Fish vary greatly in size and color. There are tiny fish, giant fish, flat fish, skinny fish, flying fish, electric fish, and fish that live in schools. Fish represent more then half of all vertebrate animals. All fish are adapted to life under water. Their streamline body is good for moving through the water. Fish can be found wherever there's water; salt water (like the ocean) and fresh water (like lakes, streams and rivers).

Gills – Las Agallas
Fish, like people, need to breathe oxygen in order to live. People get oxygen from the air they breathe. Fish get oxygen from the water which flows through their mouths and passes by their gills.

Gills are found under a flap just behind the head. They have many folds and pieces of skin which take oxygen from the water.

Eyes – Los Ojos
The fish has eyes that work independently. They can see in all directions. They can see in front and back at the same time.

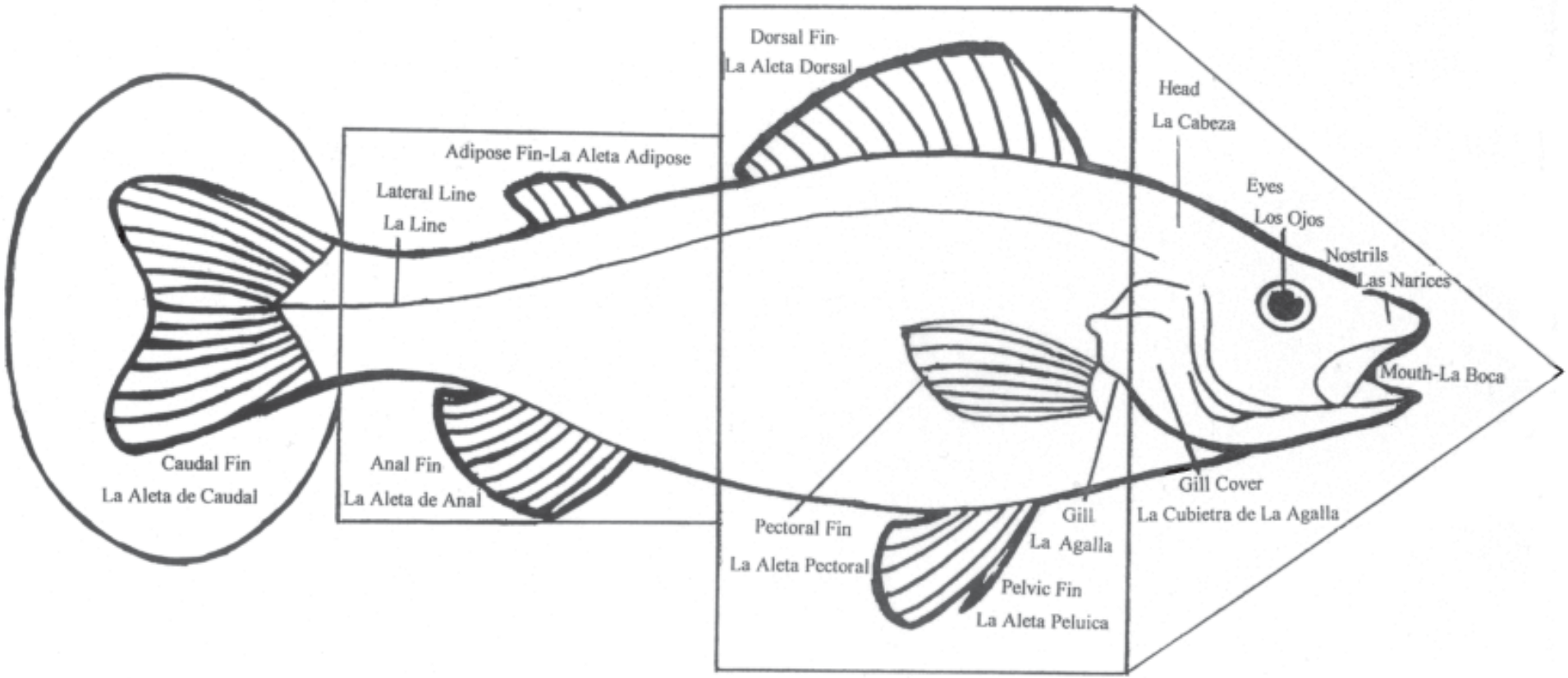


Fins – Las Aletas
Fins help the fish swim. The dorsal and anal fins help keep the fish balanced so its body won't turn from side to side. Pectoral and pelvic fins are like arms and legs in animals. These fins are used for turning, backing up and stopping, in addition to balancing. The caudal or tail fin sweeps from side to side and moves the fish forward. The adipose fin is small and fleshy and has no special use.

Lateral Line – La Linea
Most fish have a line running along each side of their body. The little holes in the line help the fish sense movements of other animals and objects in the water.

Nostrils – Las Narices
Fish use their nostrils for smelling but not for breathing. A sense of smell is used to find food. Some fish (like salmon) use smell for finding their way back to their home stream.

Cut puzzle creating geometric shapes



Extension: For Centers, color several puzzles to represent flashy tropical fish. Cut them and have students mix and match to create their own new species. Have students decide the habitat, food, name, etc. for their fish. Older students can write a mini report on their new fish. Use these reports to create a class fish book.

Stuff a Fish